Guidelines for Issuing a Boil Water Notice



Prepared by the Bureau of Public Water Supply Mississippi State Department of Health

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When a water system is placed on a boil water alert whether by the Bureau of Public Water Supply or by the water system, there are usually many questions that arise. This document was prepared to answer most of these questions so that the water system operator/official can prepare and respond when necessary.

1. When are boil water alerts necessary/required and who issues them?

Boil water alerts can be issued by the Bureau of Public Water Supply or by the officials of the water system. In most cases, it is preferred that the water system officials issue the alert. However, if there is a significant threat to public health, the water system has failed to take the initiative in potentially hazardous situations, and/or the water system needs assistance, The Bureau of Public Water Supply will issue the alert.

The Bureau of Public Water Supply will issue a boil water alert when the following occurs:

- A water system incurs an Acute Coliform Violation (e.Coli);
- A preponderance of the samples collected are total coliform positive (TC+) or e. Coli positive (EC+);
- A water system loses pressure or the system is compromised and there is a significant
 probability that contamination can or will enter the potable water supply, and the water
 system officials have not issued the alert themselves;
- A catastrophic event or natural disaster occurs; or
- A water system incurs a collected sample that is total coliform positive (TC+0 or e. Coli positive (EC+) in response to the Safe Drinking Water Act's (SDWA) Groundwater Rule (GWR).

A water system should issue a self imposed boil water alert when:

- The system loses pressure on all or part of the system; or
- The system is compromised and there is the possibility that all or part of the water system can or will become contaminated.

2. If the water system needs to issue a boil water alert, what are the steps?

First, contact the Bureau of Public Water Supply, Compliance Branch, at (601) 576-7518 or (601) 576-7400 after hours to let them know what has occurred. You should then contact those affected. If only a few customers were affected, notify them by personal contact, door-hangers, or notes taped to their doors. If a large part (or all) of the water system is affected, then you must also notify the media. Contact the radio stations, television stations, and newspapers that serve your area. Offer to fax a copy of the alert (news release) to them if you can. If you need assistance with the news media, The Bureau of Public Water Supply can issue the news release for you. The most important thing is to know how your customers typically get information. **You** are responsible for ensuring adequate notification, not MSDH. Keep in mind that although most may be reached by the media, some may not and will require other means of notification. Consider sensitive populations such as the elderly and young children.

3. What do the boil water alerts need to say?

The language included in a boil water alert depends on the situation. Regardless of the circumstances, the language should be factual, concise, and easily understood. See the following example to use as a guide when preparing your notice. MSDH also has press releases that may be utilized.



[Public Water System Name]
Located in [County Name] County, [Date]

Boil-Water Alert for [County Name] County

Water system: [PWS Name][PWS ID]
Effective date: [Date]

[PWS Name][PWS ID]issued a Boil-Water Alert for customers who receive their drinking water from their water supply located in [County Name] County.

This affects approximately <u>xxx</u> customers in [description of boil water notice area] that is serviced by the [<u>PWS Name</u>], to include [additional service area information – if necessary].

Water system officials notified the Mississippi State Department of Health of a pressure loss due to construction on a water line.

When a distribution system loses pressure, contaminants can siphon back into the water. Public health officials consider any system that loses pressure contaminated until tests prove otherwise. Health officials strongly recommend that all water be boiled vigorously for one minute before it is consumed.

The water system will be notified when tests show that the water is safe to drink.

Checklist for Safe Water Use

DO NOT

Do not drink tap water while the water system is under a boil water advisory. Do not drink from water fountains in parks, public or private buildings that receive water from the affected system.

Do not use ice unless it has been made with boiled water. Freezing will not necessarily kill harmful bacteria.

Do not use tap water to make drinks, juices, or fountain soft drinks.

DO

Wash your dishes in boiled water, or use paper plates for the next few days.

Wash your fruits and vegetables with boiled or bottled water since they may have been exposed to affected water from grocery store sprayers.

Wash your hands and bathe as usual. Bathing is safe as long as no water is swallowed. Brush your teeth with boiled or bottled water.

Cook with tap water if the food will be boiled for at least one minute.

AND REMEMBER:

Properly chlorinated water in swimming pools is safe. Fish in aquariums are not affected.

Bringing water to a rolling boil for one minute will inactivate all major types of harmful bacteria.

When your boil-water notice is lifted:

Flush faucets for a total of 10 minutes to introduce system water throughout house plumbing.

Example:

- 1 faucet run for 10 minutes
- 2 faucets run both for 5 minutes
- 3 faucets run each for 3-4 minutes

Flush any faucet **a minimum of 2 minutes** to ensure clearing of the line serving the faucet.

Discard any drinks, ice, food, etc, made during the boil water notice.

Rewash any food or drink contact items (knives, forks, plates, etc.) with "cleared" system water.

Check water filters (in faucets, refrigerators and elsewhere) and replace if necessary. **Do not use water from your hot water heater** for drinking until several exchanges of the tank have occurred.

Run dishwasher through a cycle or two before washing dishes.

MSDH Bureau of Public Water Supply: Karen Walters, 601-576-7518 (8am - 5pm).

After hours: 769-798-4258

Epidemiology hotline: 601-576-7400 (24 hours)

Press Contact: Office of Communications, 601-576-7667 (8am - 5pm)

After hours or during emergencies, call 1-866-HLTHY4U (1-866-458-4948) for media

inquiries

4. What should the water system do to get the boil water alert rescinded or released?

Again, this depends on why the system was placed on boil water alert. If the system lost pressure, pressure must be restored and the distribution system flushed. After flushing, check to insure that there is adequate chlorine residual throughout the distribution system. The Bureau of Public Water Supply recommends a free chlorine residual of 0.5 mg/l at the ends of your distribution system. When satisfied that system pressure will be maintained and there is adequate chlorine residual, begin sampling.

Samples should be representative of the affected area. Every system should collect a minimum of two samples for the first 25 connections affected, and another sample for the next 75 connections. In addition to this minimum, collect one sample for every additional 100 connections affected. For example, if the system had 300 connections affected by the pressure loss, then they would need to collect a minimum of 5 samples (3 for the first 100 connections, plus 2 for the remaining 200 connections). If the system had 1000 connections affected (3000 people) then they would need to collect a minimum of 12 samples (3 for the first 100 connections, plus 9 for the remaining 900 connections).

The following is a quick reference chart	
Number of connections affected	Minimum number of samples to collect
01-25	2
25-100	3
100-200	4
200-300	5
300-400	6
400-500	7
500-600	8
600-700	9
700-800	10
800-900	11
900-1000	12

If the notice was issued in response to bad samples, and not loss of pressure, the water system official(s)/operator(s) should attempt to determine the source of contamination and if the disinfection treatment process is working properly (checking chlorine residuals). They should immediately begin collecting samples from the affected area. If the entire system is placed on boil water alert, samples should be collected from sites representing the entire water system. If the boil water alert is issued because of an acute violation, The Bureau of Public Water Supply will give you explicit instructions on how many samples and where to take them.

5. How long do I have to sample?

You should take at least the minimum number of samples (based on the number of connections affected) each day until you get two (2) consecutive days of clear or good samples. You may have to sample every day for several days in a row before you get two consecutive days of clear samples. Do not take samples for two days and then wait to see if the results are clear. Keep sampling every day. You may be on your third or fourth day of sampling before the laboratory releases the results from your first two days of sampling. MSDH will not release you from boil water unless you have collected good samples for two consecutive days.

6. What form or card do I use to submit samples?

All samples submitted in response to a boil water alert should be sent on the 425 card with "Boil Water" checked as reason for testing. List complete physical addresses and be sure to affix barcodes to each sample and corresponding card to avoid sample rejection.

7. Who rescinds or takes the system off of the boil water alert?

If the boil water alert was issued by The Bureau of Public Water Supply, only Public Water Supply can rescind or take the system off of boil water. If the alert was issued by the water system, then the water system official(s) can rescind it **when they have two consecutive days of clear samples** and are confident that the system is no longer experiencing problems. Again, if you need assistance with contacting the media, we can assist you. See the following example to use when preparing your notice.



WATER ALERT LIFTED

[Date]

[Water System Name]

[Water System Name] [PWS System ID] lifted the precautionary "boil water alert" for customers who get their drinking water from their water system in **[County Name]** County.

Tests performed by the Mississippi Department of Health Public Health Laboratory indicate the water is now safe to drink.

Remember, we are all in the business of providing safe drinking water to the people of Mississippi. All systems will eventually have an occasion when a boil water alert is warranted. Do not hesitate to issue the notice yourself or to contact the Bureau of Public Water Supply for assistance. We must all be willing to err on the side of protecting the public health rather than worry about a customer's inconvenience.